

TREATMENT OF AGE-RELATED MACULAR DEGENERATIONAbstract of the Disclosure

Age-related macular degeneration is treated by radiation delivered from a miniature x-ray tube inserted via a catheter around the globe of the eye, to a position behind the macula. Methods are described for properly locating the catheter and x-ray tube, using illumination on the catheter and viewing through the front of the eye, or sensors on the catheter and a scanned beam shone from the front of the eye. Fluorescent ^{material} excited by x-rays can also be used. Also described are methods and devices for immobilizing the probe once properly located in the eye, for standoff of the x-ray tube from the target tissue, and for achieving prescription radiation dose in the choroid while eliminating dose to adjacent tissues. The x-ray treatment can be enhanced using a radiosensitizing drug, and can be combined with PDT.